DOCUMENT RESUME

ED 359 669 EA 025 120

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TITLE A Theory-Based Approach to Restructuring Middle Level Schools.
INSTITUTION Michigan Univ., Ann Arbor. School of Education.; National Center for School Leadership, Urbana, IL.
SPONS AGENCY Department of Education, Washington, DC.; Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE [92]
CONTRACT R117C80003; RT15A00430
NOTE 35p.
AVAILABLE FROM National Center for School Leadership, University of Illinois at Urbana-Champaign, 1208 W. Springfield, Urbana, IL 61801 ($8).
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Educational Change; *Educational Environment; Junior High Schools; Junior High School Students; *Middle Schools; Organizational Development; *Participative Decision Making; *School Restructuring; *Theory Practice Relationship
IDENTIFIERS Middle School Students

ABSTRACT

This paper describes the implementation of a reform program in a middle school located in a relatively large school district in southeastern Michigan. First, an integrative theory is presented as a promising framework for reforming middle-grade schools. The theory was developed within a social-cognitive framework that emphasizes the importance of students' interpretation of the goals that are dominant in an achievement setting. School policies and practices influence whether task-focused and/or ability-focused goals are perceived by students. A task focus is associated with optimal motivation and use of effective learning strategies. Unfortunately, a task focus becomes less common, and a focus on relative ability becomes more common when students move to middle-grade schools. To illustrate how this theory can be used in restructuring efforts, experiences of working with a team of leaders in a middle school are described. The school leadership team examined and changed school policies and practices, which promoted a school focus on learning and task mastery, rather than on performance and relative ability. Three tables are included. (Contains 83 references.) (LMI)

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A Theory-Based Approach to Restructuring Middle Level Schools

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This research is based on research with support from the U.S. Department of Education (RT15A00430) and the National Center for School Leadership (OERI Grant No. R117C80003). The authors are indebted to many colleagues, especially Carole Ames and Jacquelynne Eccles. The authors would like to thank the members of the middle school coalition. Correspondence concerning this paper should be addressed to Carol Midgley, 1400D School of Education, University of Michigan, Ann Arbor, MI 48109-1259.

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Abstract

Although periodic attempts have been made to reform middle grade schools, research has played a minor role in these efforts. The emergence of an integrative theory, supported by more than a decade of research, provides a promising framework for guiding reform efforts. This theory has developed within a social-cognitive framework that emphasizes the importance of students' interpretation of the goals that are dominant in an achievement setting. School policies and practices influence whether task-focused and/or ability-focused goals are perceived by students. A task focus is associated with optimal motivation and use of effective learning strategies. Unfortunately, a task focus becomes less common, and a focus on relative ability becomes more common when students move to middle grade schools. To illustrate how this theory can be used in restructuring efforts, we describe our experiences working with a team of leaders in a local middle school.

A Theory-Based Approach to Restructuring Middle Level Schools

There is currently a widespread belief that schooling in this nation is in a desperate state and in need of major restructuring. Restructuring seems to connote pervasive change, more than just tinkering with the existing system.

> "The word *restructure* suggests that the system is so fundamentally flawed that such terms as *innovation* and *reform* aren't robust enough to describe the changes that are needed" (Newmann, 1991, p. 458).

Calls for restructuring have come from the President, business leaders, the press, and from educators, but there is little consensus on what restructuring means, how it is to be accomplished, or what it is expected to influence (e.g., Association for Supervision and Curriculum Development, 1986; Murphy, 1989; National Commission on Excellence in Education, 1983; National Science Board, 1983). Remarkably little attention has been paid to how restructuring will affect student motivation and learning.

> "... the restructuring movement ... is trying to design organizational structures before clarifying purposes and reaching consensus on the educational ends that organizational structures should serve. For example, most of the talk one hears about school-site management, career ladders for teachers, or schools of choice never mentions how these mechanisms will teach students to write about literature, to reason about scientific phenomena, or to learn important geographic facts" (Newmann, 1991, p. 459).

There is already a fear that restructuring will go the way of other reform movements--with rhetoric giving way to reality as administrators and teachers try to respond to pressure for change without being given a framework to guide their efforts.

> "... many reforms seldom go beyond getting adopted as policy. Most get implemented in word rather than deed, especially in classrooms. What often ends up in districts are signs of new rules, different tests, revised organizational charts, and new equipment. Seldom are the deepest structures of schooling that are embedded in the school's use of time and space, teaching practices, and classroom routines fundamentally altered even at those historical moments when reforms seek those alterations as the goal" (Cuban, 1990, p. 9).

It is particularly disheartening that the need for change in middle level schools (junior high schools, middle schools, intermediate schools) has largely been ignored in calls for restructuring (Carnegie Council on Adolescent Development, 1989; Jackson & Hornbeck, 1989).

> "Reports on educational reform in the 1980s, beginning with *A Nation At Risk* (National Commission on Excellence in Education, 1983), pay virtually no attention to students in the middle grades (5-9). Although significant focus has been given to early education and high school, policy makers have largely ignored the educational experiences of 10- to 15-year olds. This lack of thoughtful and caring attention is dangerous for the future of youth and our future as a nation" (Jackson & Hornbeck, 1989, p. 831).

In this paper, we will give a brief overview of the efforts that have been made to reform middle grade schools since they were first established in this country during the first two decades of the twentieth century. We will discuss the role that research has played in understanding the relationship between middle level schools and early adolescent development. We will raise questions about the failure of these reform movements to bring about meaningful and enduring change. We will then discuss a new approach to changing middle grade schools that is school-based, anchored in theory, and aimed at enhancing early adolescents' motivation and learning. Finally, to illustrate how this approach can be used to bring about comprehensive changes in middle level schools, we will describe our experiences working with a team of leaders in a local middle school.

Reforming Middle Grade Schools--An Historical Perspective

In 1920, most students attended elementary schools from kindergarten to eighth grade and then moved to high school for grades nine to twelve; special schools for early adolescents generally did not exist. Forty years later, a profound change had occurred with four out of every five students attending a six-year elementary school, three-year junior high school, and three-year high school (Alexander & McEwin, 1986). The junior high school movement was originally driven by the need to create special schools for early adolescents that would respond to their unique characteristics, needs, and interests, but in practice these newly created schools moved young adolescents from a nurturing elementary school setting to an impersonal secondary school setting.

> "Unfortunately, the initial movement toward the junior high school was, in actuality, an attempt to alleviate the crowded conditions in existing school organizations caused by the post-World War I population boom. This expediently created junior high school conveniently inherited the Carnegie Unit requirements, schedule, departmentalization,

> and extra-curricular activities of the senior high school, a program designed for full-blown adolescents. It subsequently became staffed predominantly by teachers who had been prepared to teach in the senior high school. The original goals of the junior high were over-looked in the urgency of alleviating administrative problems" (Alexander & Kealy, 1969, p. 152).

Growing dissatisfaction with junior high schools led to the middle school movement in the 1960s. The middle school was originally conceived as a "philosophy and belief about children, their unique needs, who they are and how they grow and learn" (DeVita, Pumerantz, & Wilklow, 1970). Again a major shift occurred in the grade levels included in elementary, middle, and senior high schools. In many districts, sixth graders were moved to middle level schools and ninth graders were moved to high schools. In a recent national survey, Epstein (1990) identified a variety of school types that include seventh graders, but the sixth through eighth grade organization was the most common. Unfortunately the gap between rhetoric and reality that characterized the junior high school movement was mirrored in the middle school movement; a concern about providing a facilitative environment for young adolescents became, in practice, a reorganization of grade levels without much in the way of changes in philosophy or practice.

> "Implementation of the middle school concept, either by middle schools or junior high schools, exists more in ideal than in reality. In fact, middle schools have been established for reasons more administrative than educational" (Gatewood, 1971, p. 273).

As recently as 1988, Alexander, although acknowledging the existence of "exemplary" middle schools with programs consistent with middle school philosophy, cites surveys that indicate "a very slow spread of the new features" (Alexander, 1988, p. 109).

Increasingly those concerned with the education of young adolescents are de-emphasizing the grade span included in a building and emphasizing the importance of the policies and practices that are in place in the school (Eccles & Midgley, 1989; Epstein, 1990).

> "In some ways, then, grade span doesn't make a difference in the education of young adolescents. Rather, what happens in a school or classroom is more important than the name on the school door or the size and shape of the building. The hard work of developing excellent programs is not accomplished merely by changing grade spans or constructing smaller buildings, but by attending to practices that are responsive to the needs of early adolescents" (Epstein, 1990, p. 444).

What role has research played in identifying practices that are responsive to the needs of early adolescents? How can researchers contribute to efforts to bring about meaningful and enduring changes in middle level schools as part of the current restructuring movement?

Research on Early Adolescents and Middle Level Schools

Researchers have played a relatively minor role in the efforts to reform middle level schools. In 1977, Joan Lipsitz reviewed research and programs concerning early adolescence for the Ford Foundation. In her chapter on *Schools and the Young Adolescent*, she expresses great frustration with the lack of knowledge about effective schools and programs for young adolescents.

> "This chapter on schools is a great disappointment to us. The moment one begins to review research on programs in schools, one is in the realm of bombast, ideology, defensiveness, ignorance, emotionalism. It is not our purpose to write a position paper on schooling but rather to report on the informed positions others are taking. This section is disappointing to us because we learned so little" (Lipsitz, 1977, pp. 84-85).

Similarly, Wiles and Thompson (1975), in a review of middle school research conducted from 1968 to 1974, concluded that "existing research on middle school education is of remarkably low quality" (Wiles & Thompson, 1975, p. 421).

Until the 1980s, most of the research was aimed at comparing middle schools and junior high schools, or determining the best combination of grades for this age group. Studies comparing junior high schools and middle schools indicated that there were few substantive differences (see Gatewood, 1971, for a review of these studies). Studies aimed at determining the best combination of grades for middle level schools were usually conducted without any attempt to determine the nature of the learning environment and were largely inconclusive and inconsistent. A separate strand of research documented declines in academic performance, motivation, and attitudes toward school during early adolescence (see Eccles, Midgley, & Adler, 1984; Eccles & Midgley, 1989, for a review of these studies). The assumption was often made that these negative shifts were the inevitable result of physiological and psychological changes associated with puberty.

Only in the last decade has there been a focus on how middle grade schools enhance or impede early adolescent development. Much of this research has been spawned by an interest in the transition from elementary schools to middle and junior high schools (e.g., Berndt, 1987;

Nottelmann, 1987; Power, 1981; Schulenberg, Asp, & Petersen, 1984; Simmons & Blyth, 1987; Ward, Mergendoller, & Mitman, 1982). In a widely cited study, Simmons, Blyth, and their colleagues found that girls moving into junior high school experienced a loss in self-esteem whereas girls who stayed in a K-8 system did not. These effects persisted so that the cohort of junior high school girls was still at a disadvantage compared to the K-8 cohort after both had made the transition to high school (Blyth, Simmons, & Carlton-Ford, 1983; Simmons & Blyth, 1987). Simmons and Blyth advanced a "developmental preparedness" hypothesis based on the belief that the timing of the transition to junior high school results in more disruption to the individual than would a similar transition a few years later "after the individual has developed a more mature sense of who he or she is" (Blyth et al., 1983, p. 106).

Building on Simmons' work, Eccles and Midgley and their colleagues challenged the long-held view that the deterioration in early adolescents' academic motivation and performance is the natural result of changes associated with puberty. They hypothesized that this decline is related to the transition to a less facilitative school environment (Eccles & Midgley, 1989). In a longitudinal study following over 2500 students from the last year of elementary school to the first year of junior high school, they found a direct link between changes in the classroom environment and changes in students' beliefs and behaviors in mathematics (Eccles & Midgley, 1990; Mac Iver & Reuman, 1988; Midgley, Eccles, & Feldlaufer, 1991; Midgley, Feldlaufer, & Eccles, 1989a; 1989b). Most students moved to a less facilitative environment after the transition. In particular, they moved to classrooms where there was an increased emphasis on relative ability and relative performance. There is considerable evidence that an emphasis on relative ability and performance in the classroom undermines student motivation and learning (e.g., Hill, 1980; Hill & Wigfield, 1984; Nicholls & Thorklidsen, 1987).

To add to the debilitating effects of this increased stress on relative ability associated with the transition to junior high school, research by Nicholls and Miller (Nicholls, 1978; 1986; Nicholls & Miller, 1983; 1984) indicates that important changes in the conception of ability and intelligence occur during early adolescence so that students are particularly vulnerable to negative effects.

> "Young children conceive of ability in a self-referenced manner as learning through effort. For them, to have low ability means mere failure to master a task or to improve as much as one had hoped. After a number of intermediate levels of differentiation, adolescents conceive of ability as capacity (not merely performance) relative to that of others" (Nicholls, 1984, p. 329).

In an ability-focused environment, high effort implies low ability if others require less effort for the same performance (Jagacinski & Nicholls, 1984). For many young adolescents, an emphasis on relative ability undermines their motivation and willingness to work hard and take on challenging tasks. In addition, young adolescents are often particularly self-conscious (Simmons, Rosenberg, & Rosenberg, 1973) and concerned about how they appear to their peers. Studies indicate that self-awareness is associated with a heightened concern about the performance of others (Diener & Srull, 1979; Carver & Scheier, 1978). Young adolescents, with a heightened concerned about their relative performance and with a new understanding of ability as capacity, are put into a learning environment that is more ability-focused than the one they experienced in elementary school. Eccles, Midgley, and their colleagues have termed this a "developmental mismatch" (Feldlaufer, Midgley, & Eccles, 1988).

Restructuring Middle Level Schools

Like others, we have called for a "developmentally appropriate" school environment for young adolescents (e.g., Eccles & Midgley, 1989). Although we give examples of what we mean, we are concerned that this kind of recommendation, without an over-arching theory, is too ambiguous to serve as the basis for widespread reform. Similarly, the Carnegie Foundation Task Force on the Education of Young Adolescents warns that "a volatile mismatch exists between the organization and curriculum of middle grade schools and the intellectual and emotional needs of young adolescents" (Carnegie, 1989, pp. 8-9). Carnegie lists a number of recommendations for transforming middle level schools including creating smaller learning environments, forming teachers and students into teams, assigning an adult advisor to each student, and teaching a core of common knowledge. To create smaller learning environments, they recommend dividing a school into "small houses" with separate groups of teachers and students. Even though the Carnegie Report includes descriptions of how small houses should function, we fear that the how will become less important than the what (small house). We have been in schools with small house programs where the day-to-day experiences of young adolescents are very similar to those in departmentalized junior high schools. Similarly, team teaching is often recommended for middle level schools. What may be more important than whether or not teaming is used, is how those teams function. How do they approach the curriculum, the grouping of students, evaluation, and assessment? We strongly support the small house concept, team teaching, block scheduling, and establishment of an advisor/advisee relationship. But we see these as enabling mechanisms; that is, they make it possible to provide a developmentally appropriate learning environment for young adolescents, but these mechanisms do not guarantee that will happen. An overarching theory can help us decide how

to set up small houses, how to function in teams, how to facilitate the advisor/advisee relationship, how to recognize students for their accomplishments, or how to respond to any new educational program that is recommended for early adolescents.

Over the past two decades, a theory has been evolving that is particularly relevant for young adolescents and middle level schools. This theory has developed within a social-cognitive framework that emphasizes the importance of how students interpret events in a situation and process information about the situation. This theory derives first from research that indicates that the goals students pursue in an achievement setting influence their motivation and learning. It is based, secondly, on growing evidence that the learning environment influences the goals that are salient to students. In the next section, we will trace the development of this theory over the past decade to the point where it can now be used as a guide to reforming middle grade schools.

A Comprehensive Theory to Guide the Restructuring of Middle Level Schools

This theory is sometimes referred to as "goal theory" and is based on the belief that achievement behavior is best understood by considering the specific goals individuals pursue or value (e.g., Ames, 1987; Dweck, 1986; Maehr, 1989; Maehr & Nicholls, 1980; Nicholls, 1984). Two contrasting classes of achievement goals have been identified: "ability-focused" goals (also referred to as "performance" or "ego-oriented" goals) and "task-focused" goals (also referred to as "mastery" or "learning" goals). When students adopt an ability focus, they are concerned with being judged able (or avoiding being judged not able), and ability is demonstrated by outperforming others or by achieving success even when the task is easy. In contrast, when children are task-focused, they are concerned with gaining understanding, insight, or skill; learning is valued as an end in itself.

There is growing evidence that the goals students pursue in an achievement setting are strongly and consistently related to the types of achievement-directed behavior they exhibit. Students with an ability focus tend to select easy tasks, and to give up when faced with failure; students with a task focus tend to try hard, to persist in the face of difficulty, and to seek challenge (Ames, 1984; Ames & Archer, 1988; Elliott & Dweck, 1988; Maehr, 1989; Nicholls, 1984). In addition, students' goal orientation has been shown to influence their use of effective learning strategies (Ames & Archer, 1988; Golan & Graham, 1990; Meece, Blumenfeld, & Hoyle, 1988; Meece & Holt, 1990; Nolen, 1988; Pintrich & De Groot, 1990a). Children with a task orientation tend to use deep-processing strategies, including discriminating important from

unimportant information, trying to figure out how new information fits with what one already knows, and monitoring comprehension. Children with an ability focus tend to use surface-level strategies that include rereading text, memorizing, and guessing. Deep processing is more likely than surface level processing to lead to understanding and retention of meaningful material (Anderson, 1980; Entwistle & Ramsden, 1983). Thus there is strong and consistent evidence that a task focus is facilitative for students. The question then becomes, what is it that influences whether students are task- or ability-focused?

The Learning Environment Influences Achievement Goals

A series of experimental studies, in which goal orientation was manipulated, has enlarged our understanding of both the outcomes associated with these different goal stresses and the environmental conditions that elicit these goals (e.g., Ames, 1984; Ames & Ames, 1981; Ames & Felker, 1979; Butler, 1987; Covington & Omelich, 1984; Elliott & Dweck, 1988; Graham & Golan, 1991; Jagacinski & Nicholls, 1984). As one example, Elliott and Dweck (1988) manipulated the salience of normative evaluation, thereby focusing children on the task or on their ability. To highlight ability-focused goals, children were told that their performance was being filmed and would be normatively evaluated by experts. To highlight task-focused goals, the children were told that the task would sharpen the mind and help their studies. Children were also led to believe that they were high or low in the ability to complete the task successfully. The efforts and persistence of children who perceived that they had low ability deteriorated in the ability-focused setting, but were unaffected in the task-focused setting. High-ability children in the ability-focused setting avoided challenging tasks involving public errors. Most experimental studies such as this one have induced different goal orientations by emphasizing either self- or norm-referenced standards of evaluation, by increasing or decreasing interpersonal competition, or by allowing or disallowing retest opportunities. These laboratory studies have contributed to our understanding of how characteristics of an achievement setting are related to the goals students pursue and the behaviors they exhibit.

This research has now moved to classroom settings (e.g., Ames and Archer, 1988; Meece, 1991; Nicholls, Cobb, Wood, Yackel, & Patashnick, 1990; Nolen, 1988; Pintrich & De Groot, 1990b). In addition to confirming the influence of students' goals on their motivation and learning, work is also ongoing to determine classroom and school characteristics that lead students to a focus on the task and/or on relative ability. Ames and Archer (1988) began by identifying the theoretical distinctions between these two goals in terms of actual classroom parameters (see Table 1). They then developed an instrument to assess these classroom

characteristics from the students' perspective using items such as "Students are given a chance to correct mistakes," "The teacher pays attention to whether I am improving" (from the Mastery Scale), and "Only a few students can get top marks," "Students want to know how others score on assignments" (from the Performance Scale). Students who perceived an emphasis on mastery goals in the classroom reported using effective learning strategies, preferred challenging tasks, had positive attitudes toward the class, and had a strong belief that success follows from one's efforts. Students who perceived an emphasis on performance goals in the classroom had negative attitudes toward the class, lacked feelings of competence, and attributed failure to lack of ability.

In a longitudinal study of high school science students, Nolen & Haladyna (1990) looked at the relationship between students' task orientation and their perceptions of their teachers' goals. Perceptions that their teacher wanted them to think independently as well as thoroughly master the material appeared to positively influence both students' task orientation and their strategy-value beliefs over the course of a school year.

Nicholls and Thorklidsen (1987) assessed the relationship between students' task focus and their perceptions of their teachers' treatment of high and low achievers in the classroom. Students who perceived that their teachers encouraged and supported both high and low achievers were task-oriented; students who perceived that their teachers treated high and low students differently tended to be "ego-oriented" (ability-focused). In another study, Nicholls and his colleagues (1990) found that a classroom with mathematics instruction consistent with a constructivist view rated higher than traditional classrooms on task orientation.

Meece (1991) observed fifteen lessons in each of ten fifth and sixth grade science classrooms and identified the conditions under which students were task- or ability-focused. Students were more likely to adopt a task focus when their teachers used an active instructional approach, adapted instruction to the developmental levels and personal interests of their students, supported student autonomy and peer collaboration, and emphasized the intrinsic value of learning. It is noteworthy that the high mastery-oriented classrooms were located in elementary schools and the low mastery-oriented classrooms were located in middle schools.

Thus we are now beginning to understand how dimensions of the classroom environment, including perceived teacher goals and observed instructional practices, focus students on learning and mastery and/or on relative ability and performance. Although there is still much to

be learned about these relationships, we are now in a position to consider how learning environments might be changed in order to promote a task focus in students.

Table 1

Achievement Goal Analysis of Classroom Climate

Climate Dimensions	Mastery Goal	Performance Goal
Success defined as...	Improvement, progress	High grades, high normative performance
Value placed on...	Working hard, challenge	Normatively high ability
Reasons for satisfaction...	Working hard, challenge	Doing better than others
Teacher oriented toward...	How students are learning	How students are performing
View of errors/mistakes...	Part of learning	Anxiety eliciting
Focus of attention...	Process of learning	Own performance relative to others'
Reasons for effort...	Learning something new	High grades, performing better than others
Evaluation criteria...	Absolute, progress	Normative

From: Ames & Archer (1988)

Intervening to Change the Learning Environment

Ames (1990) has recently developed a program aimed at increasing the focus on learning and mastery in elementary school classrooms. Based on the acronym TARGET first used by Epstein (1989), the Ames intervention focuses on six aspects of the learning environment: Task, Authority, Recognition, Grouping, Evaluation, and Time. Ames worked with teachers to develop specific strategies within each of these TARGET areas that are conceptually consistent with a task or mastery orientation (see Table 2). Strategies are given to teachers in a large notebook and include, for example, sample report cards that emphasize individual progress and improvement, ideas such as "Teacher of the Day" or "Adopt-A-Class" to give students a sense of responsibility and opportunities for leadership, suggestions for using cooperative learning in various subject matter areas, and examples of contracts to encourage students to set their own goals and monitor their own progress. TARGET is helpful in that it encourages teachers to think broadly about change rather than focusing on one aspect of the learning environment.

> "The assumption underlying this intervention was that a mastery goal orientation is not dependent on a singular set of strategies or a particular instructional method, instead it involves a constellation of strategies that are conceptually related to a common achievement goal" (Ames, 1990).

This effort to change the learning environment has been successful. At the end of one year, at-risk children in the classrooms in which the strategies were introduced reported that their classrooms were more task-focused than did at-risk children in control classrooms. In addition, students in treatment classrooms showed a stronger preference for challenging work, had more positive attitudes toward math and school, had higher self-concepts of ability, were more intrinsically motivated, and used more effective learning strategies than peers in control classrooms (Ames, 1990).

Table 2

Strategies to Move Toward a Task-Focused Classroom Environment

Target Structure	Strategies	Outcome Measures	References
Task	Goal-setting Challenge	Persistence Self-competence	deCharms, 1976; Deci & Ryan, 1985; Maehr & Braskamp, 1986; Roberts & Duda, 1984; Schunk, 1985, 1989
Authority	Shared decision-making Individual choices	Autonomy/ Independence Participation in school/extra curricular activities	Connell & Ryan, 1984; De & Ryan, 1985
Recognition (for)	Improvement Participation Daily progress	Self-efficacy Self-confidence Self-worth	Ames, 1987; Covington & Omelich, 1984; Maehr, 1976; Roberts, 1984, 1986 Schunk, 1989
Grouping	Cooperative learning Peer tutoring Social Skills training	Social acceptance Social skills Self-confidence	Cosden, Pearl, & Bryan, 1985; Gresham, 1984; Gresham, Elliott, & Black 1987; Johnson & Johnson, 1975, 1984; Oden & Ashe 1977; Slavin, 1983
Evaluation (based on)	Strategic for improvement Strategy attributions	Self-regulated learning Self-efficacy	Ames & Archer, 1988; Corno, Collins, & Capper, 1982; Covington, 1985; Pariy & Oka, 1986
Time	Self-scheduling Flexible time Self-pacing	Task completion Motivation	Slavin, 1980; Wang, 1979; Wang & Stiles, 1976

Adapted from: Ames & Maehr (1989)

During the course of this intervention, teachers occasionally mentioned that school-wide policies or practices conflicted with strategies they were implementing in the classroom. For example, a school honor roll that recognized students for achieving all As was perceived by teachers as undermining their efforts in the classroom to recognize students for improvement, participation, and daily progress. Or a school-wide program to offer rewards to students who read the most books was perceived as undermining efforts by teachers to encourage students to take on challenging work. Hearing about these concerns, we began to see the need to involve administrators as well as teachers in efforts to change achievement goals, and the need to examine school-level policies and procedures as well as classroom-level strategies. Policies and practices at the school level dictate which materials and textbooks are used, how students are grouped, which students are recognized and on what basis, whether students compete or cooperate academically, if and how student autonomy is encouraged, what methods are appropriate for assessing and evaluating students, and in that way provide strong messages to students about the purpose and meaning of schooling. Focusing on the school as a whole seems especially important at the secondary level where students are exposed to many different teachers each day. Likewise, enabling mechanisms, such as block scheduling, small house organization, or team teaching may be an important prerequisite to promoting a task focus at the secondary level.

Some work is already being done to intervene at the middle school level in a way that will enhance task-focused goals. For example, Mac Iver (1991) has worked with middle school teachers to develop assessment and recognition practices that reflect effort and improvement as well as performance. Proponents of cooperative learning point out that this approach is particularly well-suited for early adolescents and should be incorporated into middle school instruction (Jones, 1990). We are calling for a more comprehensive approach that includes these elements and much more. Like Ames, we believe that a task-focus is conveyed through the totality of the learning environment. We have extended Ames' work to include the learning environment in the school as well as in the classroom. Just as Ames and her colleagues identified classroom factors that influence the saliency of different goals, so it is desirable to identify the broad range of school policies, practices, and procedures that symbolize the purpose and meaning of time spent in a particular school. We are not advocating a specific policy or strategy such as heterogeneous ability grouping or criterion-based evaluation; rather the goal is to examine and change a wide range of policies and practices in a way that will move the school as a whole toward an emphasis on task mastery, problem solving, and challenge and away from an emphasis on relative ability and performance. We are viewing change within a conceptual system that will continue to evolve and mature as it is put to use.

In Table 3 we have listed some of the major areas that could be examined when attempting to change the goal stresses within a school. This list is based on findings from the laboratory studies that manipulated goal orientation (see reviews by Dweck, 1986 and Nicholls, 1984), the field-based studies reviewed earlier in this paper, and the studies that served as the basis for the Ames' intervention (see Table 2). It is important to note that the various elements that comprise this list are not independent, although they are presented separately. For example, the use of cooperative learning will influence the approach to assessment and evaluation. It should also be noted that many of these elements, although guided by policies at the school level (such as a policy on homogeneous ability grouping), are put into operation at the classroom level.

Table 3

Strategies to Move Toward a Task-Focused School Environment[1]

School Structures	Move Away From	Move Toward
Grouping	Grouping by ability	Grouping by topic, interest, student choice Frequent reformation of groups
Competition/Cooperation	Competition between students Contests with limited winners	Cooperative learning
Assessment	Using test data as a basis for comparison	Using test data for diagnosis Alternatives to tests such as portfolios
Grading	Normative grading Public display of grades	Grading for progress, improvement Involving students in determining their grade

Table 3
(Continued)

Strategies to Move Toward a Task-Focused School Environment[1]

School Structures	Move Away From	Move Toward
Recognition/Rewards/ Incentives	Recognition for relative performance Honor rolls for high grades Over-use of praise, especially for the completion of short, easy tasks	Recognition of progress, improvement An emphasis on learning for its own sake
Student Input	Decisions made exclusively by administrator and teachers	Opportunities for choice, electives Student decision-making, self-scheduling, self-regulation
Approaches to the Curriculum	Departmentalized approach to curriculum	Thematic approaches/ interdisciplinary focus Viewing mistakes as a part of learning Allowing students to redo work Encouraging students to take academic risks
Academic Tasks	Rote learning and memorization Over-use of work sheets and textbooks Decontextualized facts	Providing challenging work to students Giving homework that is enriching, challenging Encouraging problem solving, comprehension
Remediation	Pull out programs Retention	Cross-age tutoring, peer tutoring

[1]These strategies serve as examples. Strategies will depend on the characteristics of the school, the identified needs, and the preferences of the school staff. Strategies such as cross age grouping, block scheduling, small house, and team teaching, although not listed here, are recommended as enabling mechanisms.

Restructuring Middle Schools--In Practice

It is one thing to propose a theory-based approach to restructuring middle level schools, and another to put into practice what is proposed. Can middle school administrators and teachers examine and change school policies and procedures so that a mastery or task focus becomes more pervasive and a performance or ability focus becomes less salient? In this section we describe the beginnings of our collaboration with a local middle school. In particular we will focus on the theory: how it is articulated, how it is interpreted by middle school teachers and administrators, and how it serves as a guide to restructuring. We hope our real life experiences will lend some credence to our call for a theory-based approach to restructuring middle level schools.

West Middle School (not the real name) is one of two middle schools in a relatively large school district in southeastern Michigan. Each middle school includes grades 6, 7, and 8 and houses approximately 750 students. The families in this district are largely "blue collar"; many workers are involved in some way with the auto industry. The recent recession has resulted in wide-spread layoffs, causing serious disruption to many of the families in the district. Approximately 25% of the students in the district qualify for free or reduced fee lunch. At West Middle School, the sixth grade teachers do some teaming and some of their students stay together several periods during the school day, but the school in philosophy is more like a traditional junior high school than a true middle school.

In the late fall of 1991, a team from the University of Michigan consisting of two faculty members and six graduate students (some of whom have taught at the middle school level) met with the entire staff at West to describe the program and the theory on which it is based. In advance of the presentation, staff members were given a summary of the research evidence with respect to a task or ability focus, as well as descriptions of task- and ability-focused learning environments. The program was described as a collaborative effort to review and revise school policies and practices in order to move toward a task focus in the school and thereby enhance the motivation and learning of students, particularly those "at risk." It was explained that a leadership team from West would take primary responsibility for initiating and sustaining the program and that this leadership team would work closely and continuously with the team from the University of Michigan. The staff at West felt very comfortable with the theory and with the goals of the program and voted to participate with us in a three year restructuring program. A description of the steps in the development and implementation of the program follows.

Selecting a Leadership Team

One of the features of our approach to restructuring is the concept of a "leadership team." Frequently school administrators (typically the principal and assistant principal in a middle school) are the gatekeepers for any changes that are proposed. They must consider proposed changes in light of the schedule, the existing personnel, and the available resources; they are accountable to the central administration and the parents. By identifying a *team* of leaders in the school, we hoped to alter the relationship between administrators and teachers, and to empower teachers to make educationally significant decisions. The mission of the leadership team is to examine and change school policies and practices so that the school as a whole becomes more focused on learning and task mastery and less focused on relative ability and performance. This is the over-arching framework that guides the deliberations of the leadership team. Within that framework, the leadership team has great latitude to decide what policies and practices they want to examine and change.

The leadership team at West consists of members of an already existing "school improvement team," volunteers from the faculty, the assistant principal, and a parent. This leadership team and the team from the University of Michigan (together known as the "middle school coalition") meet for at least one hour each week after the school day is over.

Providing the Framework

Coalition members agreed that it would be necessary to develop some common understandings before launching into a change program. Too frequently, programs are imposed on teachers without any concern for communicating the underlying rationale. Then, when the implementation team leaves or the incentives are withdrawn, the program dies for lack of support. One of the goals of our program is to develop awareness in future advocates for the program who will sustain it and educate others to its merit.

Considerable discussion has revolved around the distinction between an ability focus and a task focus. Using examples and anecdotes to illustrate this distinction has been particularly helpful. For example, to distinguish between a task-focused child and a performance-focused child, we gave the example of a student coming home from school and telling her mother she had a successful day because she got a B+, did better than her best friend, or won a prize for her essay. We contrast that with a student saying she had a successful day because she finally mastered a difficult algebra problem, read a wonderful story about India, or conducted an

interesting experiment in science. To illustrate how one orientation or the other might influence a person's behavior, we gave many examples, including the example of choosing not to take a difficult but interesting course in college because it might lower your grade point average.

When we discussed strategies that focus students on task mastery or on relative ability, the members of the leadership team came up with their own examples. In a discussion of how the nature of evaluation influences students' perceptions of achievement goals, one teacher talked about how children are evaluated at home in comparison to how they are evaluated in school. She gave the example of teaching a child how to ride a bike or how to make a pie. Parents don't tell a child, "you're doing a poor job of learning how to ride a bike compared to other children I've known." They don't say, "this is a fair pie, but not as good as your brother makes." These strategies would undermine the child's motivation and perhaps cause him or her to give up or avoid these tasks in the future. Rather, parents say, "pedal faster, try using less sugar next time." In other words, they focus the child on mastering the task and not on relative performance. The members of the leadership team seemed to feel increasingly comfortable with the theory and became adept at explaining it to other members of the staff. They explain the theory in a way that is jargon free and particularly meaningful to other teachers and to parents.

During the first few meetings, there was some discussion of the role of the university team and the role of the leadership team. In the classroom intervention developed by Ames, teachers decided which strategies they would use in their classrooms, but they were encouraged to use strategies from all the TARGET areas. In a similar way, we assured the leadership team that they would select the policies and procedures to review and change, but we emphasized that they should be thinking broadly about the learning structures in the school. We told them that we would help to determine how those policies and procedures could be changed in a way that will move the school toward a focus on learning and mastery and away from a focus on relative ability. We believe this adds to the adaptability and versatility of this theory-based approach, so that it can serve as a model for restructuring middle level schools. The actual policies and practices that are selected for examination will differ from school to school. Change plans will depend on student characteristics, on school characteristics, and on the community context.

To emphasize the school-wide scope of this program, we discussed the distinction between programs that aim to change children so they will fit in schools, and programs that aim to change schools so that all children will fit. Our approach is to change the school environment

in an enduring way. In reviewing the school improvement projects the staff at West has implemented over the last few years, very few were aimed at altering the everyday functioning of the school. Many projects were focused on raising money to buy equipment; some were focused on recognizing students for various accomplishments, particularly good grades. Others involved "add on" programs such as assemblies by "motivational" speakers.

At one of the meetings, the assistant principal said that his top priority was to develop a program to help young adolescents understand the physiological changes they are experiencing. We agreed that this is an admirable goal, but took the opportunity to point out that school-wide changes could be made that would reflect an understanding of early adolescent development. We discussed the research that indicates that the notion of ability as capacity emerges during early adolescence and may lead many students, in an ability-focused environment, to avoid high effort and challenge. This led to a conversation about the ways in which middle schools emphasize relative ability and performance. Two of the sixth grade teachers on the leadership team had taught at the elementary level before the district moved to a middle school grade organization. One teacher talked about how difficult it had been for her to adjust to the new emphasis on relative ability in the middle school. She pointed to the grading system. "Grades were more 'squishy' in elementary school. We could take effort into account or extenuating circumstances. That's not the case in middle school." Several teachers expressed dissatisfaction with the emphasis on grades, and said that it's hard to get students focused on learning when grades are so dominant in the school. They talked about students who would never get high grades under the current system and how that was discouraging and debilitating for them. They also talked about homogeneous ability grouping in the middle school and several of them expressed concerns about the effect on students of being labeled as low or high ability students. "For kids at this stage of life, which ability group you're in is more important than what you're learning." We talked about the unfortunate consequences of moving into a more ability-focused learning environment just as you are becoming especially concerned about how able you appear to your peers. These are examples of ways in which the theory is being articulated and interpreted.

Developing School Improvement Plans

After the coalition had developed some common understandings of goals and roles, a brainstorming session was held to list a wide range of policies, procedures, and practices that could be examined during the three years of collaboration. Among those suggested by the leadership team were tracking, grouping, grading, homework, grade retention, discipline,

counseling, the availability and use of computers, opportunities for student interaction and cooperation, team teaching, "put downs" by students and teachers, opportunities for staff communication and interaction, opportunities for staff planning and development, appropriateness of curriculum, class size, individualized instruction, relations with parents, and organization of the school day. There was particular enthusiasm for considering some version of team teaching or small house. This led to a discussion of how team teaching or the small house organization can be used to enhance a focus on learning and mastery. We were able to discuss with them different approaches to teaming and small house and to emphasize the need to think not only about scheduling (the assistant principal's chief concern) but how the day-to-day experiences of students could be different than they are now.

We arranged a visit to an area middle school known for its effective small house program. One of the teachers on the team mentioned that she had been teaching in the district for sixteen years and had never visited another school or program. Members of the coalition had a chance to visit classrooms, talk with teachers and students, and ask questions of school leaders. It became obvious to all of us that the emphasis in this school was on learning and mastery and that relative ability was de-emphasized. The team members were invigorated by this visit and new ideas began to emerge.

Implementing School Improvement Strategies

As the end of the school year approached, the leadership team expressed a strong desire to make plans for changes at West that would take effect in the fall. They felt that the time had come to involve the whole staff in planning for these changes. One member of the coalition suggested holding a school-wide meeting or a retreat to share ideas and to solicit support. One of the teachers on the team distributed a flyer to the staff with the heading, "Dreamers of West, Unite! You have Nothing to Lose But Your Doldrums." He prefaced a survey about preferred times and places to meet with this statement:

> "What if teachers were empowered to make their dreams reality? What if teachers were just empowered to dream? Or, just given the time to dream? It's a certainty that West Middle School would never be the same again. At the last School Improvement/U. of M. Team meeting a radical idea was raised. What if we gave teachers time to get together and talk. No group of people is more innovative and creative than teachers. How can we tap into that powerful resource? The idea of a retreat was kicked about by the group with great enthusiasm. But the question of when, how, and again WHEN?,

kept cropping up. Hence a brief survey (with no promises) is being put foreword for your reaction. Please complete and return to me by Friday, April 12."

The University team was not involved in the writing of this flyer. It was becoming obvious to us that the team from West did indeed feel ownership of the restructuring program and that they were beginning to believe that change was possible. The survey results were tabulated and an all-day retreat was scheduled. The retreat opened with a discussion of the focus of the retreat and the overarching theory by the assistant principal and one of the members of the University team. Next, members of the coalition described some of the changes that were being considered (small house, team teaching, cooperative learning, advisor-advisee homebase, alternatives to testing, new approaches to student recognition, school day reorganization, and new instructional strategies); questions from the staff were encouraged. Two sessions were then held to discuss the various change proposals. Staff members were thus able to participate in the discussion of two proposed changes. Staff members who had not been on the leadership team participated actively and appeared to feel engaged in the change process. Whenever possible, members of the coalition framed the questions that were being addressed in terms of the theory. At the end of the day, there was a debriefing session so that all participants could hear the ideas that were generated and could talk about changes they saw happening in the fall. Many concerns were raised, as expected, but there was considerable support for moving ahead with some changes in the next academic year. The coalition is now working to identify teacher teams and to develop a schedule for the fall that will allow change to take place (an advisor/advisee period, block scheduling to facilitate teaming). During the next academic year the coalition will be working actively with the teacher teams to support practices that will move the school toward a focus on learning and mastery. The scheduling and teaming will allow teachers to rethink their approaches to the curriculum, to grouping, to evaluation, and to many other instructional and organizational practices. In addition, other school-wide policies and practices will be examined using the task and performance goal framework, and many different change strategies will be implemented. Although University participation in the demonstration phase of this project is limited to three years, the expectation is that the leadership team and the school staff as a whole will continue to examine and to revise school policies and procedures using the same framework.

When we began this coalition with the leadership team in the middle school several months ago, we did not know whether it would be possible to work together productively to make changes in the school environment using a goal-theory framework. We are optimistic now that changes will be made and that they will endure. Too long we have told administrators and

teachers what to change, based on the latest educational fad. Teachers have often felt uninvolved and uncommitted. Too frequently, those changes have been implemented in a way that undermines their purpose. As a result, suggestions for reform have a way of recycling (Cuban, 1990). Ours is a very different approach. It focuses on changing the middle school environment and not on changing the child, it centers on teachers deciding what it is they want to change, and it deals with the very important issue of how changes are made by providing an overarching theory to guide decisions.

Over the next two years we will be focusing in particular on what it is about this process that enables teachers and facilitates change. In particular, we will be examining the role of the University team in precipitating this change process and considering ways that a similar process might be initiated and sustained without outside intervention. We have come to a point in history where research on early adolescence and middle level schools can be used to inform change efforts. Researchers and middle grade educators are in a position to take advantage of the current mood for restructuring and to work collaboratively to improve middle grade schools. We hope that this theory-based approach to restructuring middle level schools can serve to facilitate that melding of research and practice.

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